

Unit 2

Day 4

Section 1.7

Rationalizing again

1)

$$\frac{\sqrt{3}}{\sqrt{2}+\sqrt{3}} \cdot \frac{\sqrt{2}-\sqrt{3}}{\sqrt{2}-\sqrt{3}} = \frac{\sqrt{6}-\sqrt{9}}{2-\sqrt{6}+\sqrt{6}-3} = \frac{\sqrt{6}-3}{-1}$$

$$-\sqrt{6}+3$$

or

$$3-\sqrt{6}$$

2)

$$\frac{\sqrt{2}-2}{4\sqrt{2}-3\sqrt{3}} \cdot \frac{4\sqrt{2}+3\sqrt{3}}{4\sqrt{2}+3\sqrt{3}} = \frac{8+3\sqrt{6}-8\sqrt{2}-6\sqrt{3}}{32-27}$$
$$= \frac{8+3\sqrt{6}-8\sqrt{2}-6\sqrt{3}}{5}$$

3)

$$\frac{2x}{3 + \sqrt{x+y}} \cdot \frac{3 - \sqrt{x+y}}{3 - \sqrt{x+y}} = \frac{6x - 2x\sqrt{x+y}}{9 - (x+y)} = \frac{6x - 2x\sqrt{x+y}}{9 - x - y}$$

$$\frac{6x - 2x\sqrt{x+y}}{x(x-y)} = \frac{6 - 2\sqrt{x+y}}{x-y}$$

Continue with Day 5 Instruction, if time.

Homework:

Day 4 homework

Continue with Day 5 Instruction, if time.